

Nanotechnology has the potential to create entirely new industries and radically transform the basis of competition in other fields, and Silicon Valley proudly leads our nation in research and development of this promising new technology. To continue to foster the development of this promising field, I introduced the [Nanotechnology Advancement and New Opportunities \(NANO\) Act](#).

The NANO Act is a comprehensive bill to promote the development and responsible stewardship of nanotechnology in the United States. The legislation draws upon the work of the Blue Ribbon Task Force on Nanotechnology, a panel of California nanotechnology experts with backgrounds in established industry, startup companies, consulting groups, non-profits, academia, government, medical research, and venture capital that I convened with during 2005.

Nanotechnology has the potential to create entirely new industries and radically transform the basis of competition in other fields, and I am proud of my work with former Science Committee Chairman Sherry Boehlert on the [Nanotechnology Research and Development Act of 2003](#) to foster research in this area.

But one of the things I have heard from experts in the field is that while the United States is a leader in nanotechnology research, our foreign competitors are focusing more resources and effort on the commercialization of those research results than we are.

In its report [Thinking Big About Thinking Small](#), the Blue Ribbon Task Force on Nanotechnology made a series of recommendations for ways that the nation can promote the development and commercialization of nanotechnology. The NANO Act includes a number of these recommendations.

In addition, the bill addresses concerns that have been raised about whether the federal government is doing enough to address potential health and safety risks associated with nanotechnology. The NANO Act requires the development of a nanotechnology research strategy that establishes research priorities for the federal government and industry that will ensure the development and responsible stewardship of nanotechnology. This strategy will help to resolve the uncertainty that is one of the major obstacles to the commercialization of nanotechnology – uncertainty about what the risks might be and uncertainty about how the federal government might regulate nanotechnology in the future.

The NANO Act also includes a number of provisions to create partnerships, raise awareness, and implement strategic policies to resolve obstacles and promote nanotechnology.

## **Bill components**

The bill would:

- create a public-private investment partnership to address the nanotechnology commercialization gap;
- establish a tax credit for investment in nanotechnology firms;
- authorize a grant program to support the establishment and development of nanotechnology incubators;
- establish a Nanoscale Science and Engineering Center for “nano-CAD” tools;
- establish grant programs for nanotechnology research to address specific challenges in the areas of energy, environment, homeland security, and health;
- establish a tax credit for nanotechnology education and training program expenses;
- establish a grant program to support the development of curriculum materials for interdisciplinary nanotechnology courses at higher education institutions;
- direct NSF to establish a program to encourage manufacturing companies to enter into partnerships with occupational training centers for the development of training to support nanotechnology manufacturing; and
- call for the development of a strategy for increasing interaction on nanotechnology interests between DOE national labs and the informal science education community.

I look forward to working with Science and Technology Committee Chairman Gordon to incorporate these provisions as his committee works to reauthorize the nation’s nanotechnology research and development program.